"without adversely influencing the function of the conjugates by displacing the biomolecules by the detergent or by interactions of the biomolecules or the colloidal particles with the detergent after loading". Pertinent disclosure supporting this limitation can be found in the present specification at page 6, lines 18-23.

Thus, it is respectfully submitted that the rejection under 35 U.S.C. § 112, first paragraph, is overcome. Reconsideration and withdrawal thereof are respectfully requested.

Section 102/103 Rejections

The Office Action rejects claims 24, 30, 31 and 33 under 35 U.S.C. 102(e) as being anticipated by Liberti et al. (U.S. Patent No. 5,597,531). The Office Action also rejects claims 25-29 and 34-39 under 35 U.S.C. § 103(a) as being obvious over Liberti et al. in view of Nichtl et al. (U.S. Patent No. 5,972,720). These rejections are traversed as they may apply to the amended claims.

Applicant respectfully submits that, with the above amendments to the claims, the subject matter of the present invention is both novel over Liberti et al. and inventive over Liberti et al. in combination with Nichtl et al., as Liberti et al. requires an interaction of the detergent with the metal oxides according to the description in col. 4, lines 45-52, col. 5, lines 39-42 and col. 6, lines 6-10.

For example, Liberti et al. teach that "[m]agnetically responsive metal oxides can be coated effectively by employing in the coating process means for disrupting crystalline agglomerates such that coating can take place during the disruption. A wide range of materials (including dextran, proteins, synthetic polypeptides, polymers,

copolymers, **detergents** and combinations thereof) can be coated onto such crystals resulting in colloidal magnetically responsive particles" (col. 4, lines 45-52, emphasis added). According to Liberti et al., "[t]he coating material is selected in each case with regard to its ability to adhere to or to be adsorbed on the surface of the deagglomerated or subdivided particle...[and]it is important to select a coating material which not only stabilizes the sub-divided magnetic particles, but does so with a coating which remains intact when the coated particles are removed from suspension..." (see col. 5, lines 39-42 and col. 6, lines 6-10).

Thus, Liberti et al. does not teach or suggest the absence of adverse influence on "the function of the conjugates by displacing the biomolecules by the detergent or by interactions of the biomolecules or the colloidal particles with the detergent after loading, as required by the present claims. This, it is respectfully submitted that the present claims are not anticipated by and would not have been obvious over Liberti et al.

For at least these reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) and 103(a) are respectfully requested.

Furthermore, claims 24 and 29-33 are rejected under 35 U.S.C. § 102(b) as being anticipated by Olsen et al. (U.S. Patent No. 5,393,658). This rejection is also traversed as it may apply to the amended claims.

Olsen teaches that "suspected microorganisms...are treated with a detergent solution to expose additional reactive epitopes of the antigen in addition to forming an antigen detergent complex" (col. 2, lines 26-29). In this case, it would appear that the detergent solution, by forming an antigen detergent complex, must interact with the

biomolecules. Thus, the detergent of Olsen does not meet the above-discussed newly added limitation regarding no adverse influences on the function of the conjugate.

Additionally, Olsen et al. does not use any detergent when producing conjugates of gold and monoclonal antibodies (Example 1, col. 3, line 54 to col. 4, line 2). A detergent is added only to a solution of antigen prior to contacting said antigen with the completed conjugate of gold and antibodies. There, the antigen binds to the antibody in the conjugate via its antigen binding site. The antigen treated with the detergent, however, does not bind to the gold particles.

For at least the above reasons, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b) are respectfully reuested.

Conclusion

Applicant respectfully submits that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300.

Respectfully submitted,

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Attachment: Amended Claim Marked-up to Show Changes

Amended Claim Marked-up to Show Changes

24. (Amended) A method for stabilizing conjugates composed of colloidal particles and biomolecules, the method comprising:

adding detergent to a solution containing biomolecules, and thereafter

loading colloidal particles with the solution

without adversely influencing the function of the conjugates by displacing the biomolecules by the detergent or by interactions of the biomolecules or the colloidal particles with the detergent after loading [wherein the colloidal particles are used without being previously treated to subdivide agglomerates].

31. (Twice Amended) A process for producing colloidal particles having biomolecule absorbing surfaces, the process comprising:

adding a detergent to a solution containing biomolecules, and thereafter

contacting colloidal particles with the solution

without adversely influencing the function of the conjugates by displacing the biomolecules by the detergent or by interactions of the biomolecules or the colloidal particles with the detergent after loading. [wherein the colloidal particles are used without being previously treated to subdivide agglomerates].

34. (Twice Amended) A method for stabilizing conjugates composed of colloidal particles and biomolecules, the method consisting essentially of:

adding detergent to a solution containing biomolecules,

loading colloidal particles with the solution, and thereafter

adding an additional stabilizer

without adversely influencing the function of the conjugates by displacing the biomolecules by the detergent or by interactions of the biomolecules or the colloidal particles with the detergent after loading. [wherein the colloidal particles are used without being previously treated to subdivide agglomerates].

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

NICHTL

Group Art Unit: 1641

Application No.: 09/633,295

Examiner: Pensee Do

Filed: August 7, 2000

Attorney Dkt. No.: 100564-00025

For: GOLD CONJUGATES CONTAINING DETERGENT

AMENDMENT AND FEE TRANSMITTAL

Commissioner for Patents
Washington, D.C. 20231

Date: September 26, 2002

Sir:

Transmitted herewith is an Amendment in the above-identified patent application.

☒ No additional claim fee is required.

	(Column 1)	(Column 2)	(Column 3)	SMALL ENTITY			OTHER THAN A SMALL ENTITY	
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADD'L FEE	OR	RATE	ADD'L FEE
TOTAL CLAIMS	16	20	=0	x 9	$		x 18	$
INDEP CLAIMS	1	3	=0	x 42	$		x 84	$
☐ FIRST PRESENTATION OF MULTIPLE DEP. CLAIM				+140	$	OR	+280	$
					$			$

☐ Please charge **Deposit Account No. 01-2300, referencing docket number** _____, in the amount of $. for: . A duplicate copy of this sheet is attached.

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The U.S. Patent and Trademark Office is hereby authorized to charge and deficiency or credit any overpayment of fees associated with this communication to Deposit Account No. **01-2300** referencing docket number **100564-00025**. A duplicate copy of this sheet is attached.

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